**PATENT** 

#### IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant(s):

Toru IDE

Int'l Application No.:

PCT/JP2004/013679

Application No.:

**NEW** 

Filed:

June 9, 2006

For:

ARTIFICIAL LIPID BILAYER MEMBRANE LIPID

SUBSTITUTION METHOD, ARTIFICIAL LIPID BILAYER

MEMBRANE OBTAINED BY USING LIPID

SUBSTITUTION METHOD, ARTIFICIAL LIPID BILAYER

MEMBRANE FORMATION DEVICE, AND ION PERMEATION MEASURING DEVICE (as amended)

# INFORMATION DISCLOSURE STATEMENT (SUBMISSION CONCURRENT WITH THE FILING OF A NEW PATENT APPLICATION)

Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314 Mail Stop PCT June 9, 2006

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

### I. <u>LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION</u>

The patents, publications, or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

#### II. COPIES

Submitted herewith is a legible copy of (i) each U.S. and foreign patent; (ii) each
publication or that portion which caused it to be listed; and (iii) all other information
or that portion which caused it to be listed.

This application is a National Phase of a PCT application. Some or all of the documents listed on the PTO-1449 are not enclosed because they were cited in the International Search Report and copies should be forwarded from the International Search Authority. If copies are needed, please contact the undersigned.

Because the present application is being filed after June 30, 2003, no copies of the U.S. patents or U.S. patent application publications which are listed on the attached Form 1449 are enclosed pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i). Any foreign patent documents or non-patent literature listed on the attached Form 1449 are enclosed herewith.

# III. CONCISE EXPLANATION OF THE RELEVANCE

(check at least one box)

# a. DOCUMENTS IN THE ENGLISH LANGUAGE

Some of the attached patents, publications, or other information in the English language do not require a statement of relevancy.

### b. DOCUMENTS NOT IN THE ENGLISH LANGUAGE

A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:

Many of the documents have been discussed in the PCT Search Report, the PCT Preliminary Examination Report, and/or throughout the specification. The PCT Search Report and PCT Preliminary Examination Report indicate the degree of relevance found by the PCT Office, thereby satisfying the requirement for a concise explanation. See MPEP 609(A)(3).

### c. ENGLISH LANGUAGE SEARCH REPORT

An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(A)(3).

#### 

The following additional information is provided for the Examiner's consideration.

Japanese Publication No. 2002-505007 corresponds to U.S. Patent 6,177,000. Japanese Publication No. 11-508043 corresponds to U.S. Patent 6,316,273. Japanese Publication No. 11-316210 corresponds to U.S. Patent 5,443,955.

# 10/582338

New PCT National Phase Application Docket No. 12480-000181/US

# IAP20 Rec'd PCT/PTQ 09 JUN 2006

e. <b>EQUIVALENCY DOCUMENTS</b>	

#### **FEES**

This Information Disclosure Statement is being filed concurrently with the filing of a new patent application; therefore, no fee is required.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 08-0750.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C.

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Documents

International Search Report (PCT/ISA/210)

# FORM HDP-1449 (Based on Form PTO-1449)

#### PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)

Sheet 1 of 1

ATTORNEY DOCKET No.	SERIAL NO. 2 7 7 9			
12480-000181/US	1 New Application			
APPLICANT				
ToriAP20 Rec'd PCT/PTO 09 JUN 2006				
FILING DATE	GROUP			
June 9, 2006	Unknown			

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
		6177000	01/23/2001	PETERSON		
		6316273	11/13/2001	KING		
		5443955	08/22/1995	CORNELL et al.		

FOREIGN PATENT DOCUMENTS							
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
JP		11-056389	03/02/1999	JAPAN		Abstract	
JP		2003-194772	07/09/2003	JAPAN		Abstract	
JP		2001-091494	04/06/2001	JAPAN		Abstract	
JP		04-273029	09/29/1992	JAPAN		Abstract	
JP		2002-505007	02/12/2002	JAPAN		US	
JP		11-508043	07/13/1999	JAPAN		US	
JP		11-316210	11/16/1999	JAPAN		Abstract	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)				
Ref. Desig.	Examiner's Initials			
		International Search Report (PCT/ISA/210)		
		Toru Ide et al., Nippon Seirishi, Seirigaku Jikken Koza "Bunshi Seirigaku" Tan itsu Channel no Denki Kogakuteki Doji Keisoku. Vol. 65, No. 9, pp. 283-290 (09/01/2003).		
		"An Artificial Lipid Bilayer Formed on an Agarose-Coated Glass for Simultaneous Electrical and Optical Measurement of Single Ion Channels". Toru Ide. Biochemical and Biophysical Research Communications Vol. 1, 265, No. 2, pp. 595-599 (1999).		
		"Combined Spectroscopic and Electrical Recording Techniques in Membrane Research: Prospects for Single Channel Studies". A.G. Macdonald et al. Progress in Biophysics & Molecular Biology, Vol. 63, No. 1, pp. 1-29 (1995).		
		"Heimen Rin Shishitsu Nijusomaku o Tsukatta Ion Channel no Sokutei". Toshiro Hamamoto. Cell Technology Vol. 7, No. 1, pp. 87-96 (1996).		
		"Planar Bilayer Method for Studying Channel". New Patch Clamping Experiment Technique published by Yoshiokashoten pp. 208-215 (2001).		
		"Development of an Experimental Apparatus for Simultaneous Observation of Optical and Electrical Signals from Single Ion Channels". Toru Ide et al. Single Mol. 3 (2002) 1, pp. 33-42 Wiley-VCH.		

Examiner: Date Considered:			_
	Examiner:	Date Considered:	